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REALIZING IT BUSINESS VALUE FROM RETAIL CHANNEL INTEGRATION: A CONFIGURATIONAL STRUCTURE-STRATEGY FIT ASSESSMENT

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Abstract

Retail organisations are making investments into information technologies (IT) to integrate their physical and online retail channels in order to meet the demands of multichannel consumers. Redesigning the organisation into an IT-enabled hybrid organisational structure is a complex process that involves decisions to either integrate or differentiate numerous organisational activities. Drawing on the configuration theory, this paper used a survey dataset of 125 multichannel retail organisations and applied the profile deviation approach to assess the coalignment between hybrid organisational structure and generic business strategies of prospectors, analyzers and defenders. Results suggested that organisations that have hybrid structures that are most similar to the high-performing organisations of their strategic type performed better than those whose firm profile deviated from the ideal profile. Implications for research and practice are provided.

Keywords: business value of IT, retail channel integration, configuration theory, structure-strategy fit

1 INTRODUCTION

The ubiquitous availability of network connectivity has bred a new generation of consumers who expect retailers to provide them with information and services at a retail channel that is most convenient to them. They demand the convenience of browsing the store's Website for pre-purchase information and then having the flexibility of choosing their preferred channel to complete the transaction (The Economist 2005). Recent anecdotal evidences have reported that consumers who utilized multiple retail channels spent more than single channel consumers and are also more loyal to the retailers (Stringer 2004). Such shifts in consumer behaviour have served as a call for retailers to re-examine their channel integration strategies in order to transform themselves into hybrid commerce organisations – organisations that conduct business with consumers through the integration of physical and online retail channels.

This imperative to embrace hybrid commerce is further fuelled by the increasing environmental turbulence. New technologies are rapidly removing the wall between online shopping and in-store shopping (Buderi 2005). The industry is currently experiencing structural changes whereby retailers such as Tesco, Argos, Ikea, Wal-Mart, Best Buy, and Sears are improving the functionalities of their online store while companies such as L.L. Bean, which only used to have an extensive catalogue and strong web presence has started to build physical retail stores. The imminent challenge for retailers is to prioritize their investments among multiple retail channels (Wagner 2005).

However, there is currently a lack of empirical research to provide managerial guidance as to which are the retail operations that can be integrated with appropriate investments into IT, and what are their associated performance implications. This paucity of literature is unfortunate to retail managers who are attempting to redesign their organisational structure into a hybrid form. Next, the heterogeneous nature of the retail industry suggests that retailers' business strategies very much depend on the retail sector and the competitive environment that it exists. Should organisations try to emulate the strategies and organisational structure of the best-performing firm in the retail industry regardless of the similarities between its own strategic orientation and that of the industry leaders? How do firms configure their IT-enabled hybrid organisational structure so that they are able to realize business value from their IT investments to reengineer the organisation through retail channel integration?

Drawing upon the theoretical perspectives of configuration theory, the current study attempts to shed some light on these pressing issues to guide managerial practice in IT investments to transform their retail organisations into hybrid IT-enabled structure. In addition, it also hopes to make theoretical contributions by examining the performance implications of the coalignment between organisational structure and business strategy in the emerging e-business context of multichannel retailing.

2 THEORETICAL FOUNDATIONS

2.1 Configuration Theory

Configuration theory posits that there is a strong relationship between strategy and structure of the firm (Miller 1986). For each set of strategic characteristics, there exists an ideal set of organisational characteristics that yields superior performance. A configuration is a multidimensional constellation of mutually supportive strategic and organisational characteristics of a firm (Meyer et al. 1993; Miller 1986). Since organisational features are interrelated in complex and integral way, organisations may be driven toward a common configuration to achieve internal harmony among its elements of strategy, structure and context. Hence, configurations are useful to express complicated and interrelated relationships among many variables so as to order organisations and to provide a rich understanding (Dess et al. 1993).

2.1.1 *Business Strategy: The Miles and Snow Typology*

Miles and Snow (1978) identified four ideal types of business strategies that can be pursued by organisations. They posited that defenders, analyzers, and prospectors are likely to perform equally well but that these three strategy types will outperform reactors. Indeed, reactors are often excluded in most empirical studies since it is regarded as a “non-strategy”.

The *prospector* is the most dynamic of the organisational forms. It operates in an environment characterized by rapid and unpredictable changes and adapts through active identification of opportunities to develop new products or markets. The *defender* is a less dynamic form of organisation operating in an environment that is more stable and predictable than that of the prospector. *Analyzers* adopt some characteristics of prospectors and some characteristics of defenders, seeking effectiveness through both efficiency and new products or markets. In fact, the analyzer is a “unique combination of the Prospector and Defender types” (Miles & Snow 1978, pp. 68).

Since configurations defined in a typology are ideal types, there can be more than one way to succeed in each type of setting. This notion of strategic equifinality suggests that an organisation can achieve an outcome by a variety of strategic actions or strategies (Meyer et al. 1993). Hence, it implies that flexibility is available to organisation designers when creating organisations to achieve high performance (Gresov & Drazin 1997).

2.1.2 *Organisational Structure: A Continuum of Differentiation and Integration*

An organisation’s structure encompasses an organisation’s management processes used to coordinate and control its operations (Hrebiniak et al 1989). Its structural form can include the mix of products, services, and resources that define it as a distinct entity (Romanelli 1991). A key dimension of organisation structural design is the concept of differentiation and integration. *Differentiation* refers to the creation or emergence of differences in organisations and the segmentation of the organisational systems into subsystems (Lawrence & Lorsch 1967). An organisation can be differentiated spatially (by distributing the work done into a number of places) or horizontally (by functional areas) (Mileti et al. 1977). *Integration* refers to bringing together and coordinating activities of organisational units. It entails the process of achieving unity of efforts among the various subsystems in order to accomplish an organisational task (Lawrence & Lorsch 1967). Organisational integration is the extent to which distinct and interdependent organisational components such as business processes constitute a unified whole (Barki & Pinsonneault 2005). Different organisational structures reflect the degree to which processes, people and technologies are integrated within an organisation.

In our study context, we regard the operations of hybrid commerce organisations as being divided spatially into physical store and online Website as well as horizontally into various functional areas. If the retail operations between these two channels are tightly linked and synchronized, then the level of integration is high (and hence the level of differentiation is low). Conversely, if the operations are conducted rather independently, the level of integration would be low.

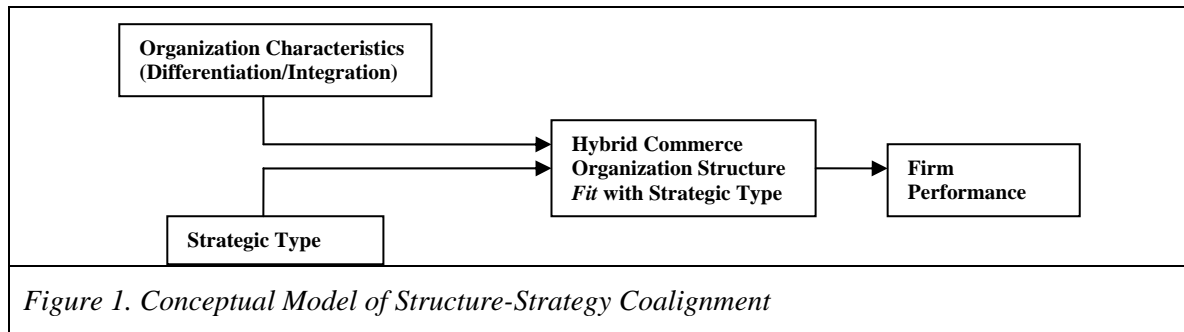
2.1.3 *Defining the Multichannel Hybrid Retail Organisational Structure*

The hybrid organisation structure characteristics were identified through an extensive survey of the literature on traditional retailing, electronic commerce and multi-channel retailing (Amit & Zott 2001; Daniel & Wilson, 2003; Gulati & Garino 2000; Keeney 1999; Mason et al. 1993; Samli 1989; Steinfield et al. 2002; Wallace et al. 2004). Table 1 shows the details of the questionnaire used to assess the hybrid organisational structure.

Integrated Promotion 1. The firm's brand name, slogan and logo are consistent both online and offline. 2. The Website highlights in-store promotions that are taking place in the physical store. 3. The Website advertises the physical store by providing address and contact information of the physical store. 4. The physical store advertises the Website through pamphlets, receipts, and carrying bags. 5. The Website publishes advertisements appearing in newspapers or pamphlets.
Integrated Transaction Information Management 6. The firm keeps an integrated purchase history of customers' online and offline purchases. 7. The firm allows customers to access their prior integrated purchase history. 8. The firm makes future purchase recommendations to customers based on past consolidated online and offline purchases. 9. The Website customizes Web pages for customers based on past consolidated online and offline purchases.
Integrated Product and Pricing Information Management 10. Product/service descriptions are consistent in both the physical store and Website. 11. Product/service category classifications are consistent in both the physical store and Website. 12. Information on stock availability is consistent in both the physical store and Website. 13. Product/service prices are consistent in both the physical store and Website. 14. Discounts are consistent in both the physical store and Website.
Integrated Information Access 15. The Website allows customers to search for products available in the physical store. 16. The firm allows checking of inventory status at the physical store through the Website. 17. The physical store provides Internet kiosks for customers to access the information and functionalities available on the Website. 18. The physical store provides Internet kiosks for customers to access store maps to quickly locate items in the store. 19. The physical store provides Internet kiosks for customers to find answers to frequently asked questions without making enquiries from in-store customer service assistants.
Integrated Order Fulfilment 20. The gift coupons or vouchers issued by the store can be redeemed either online or offline. 21. The Website allows ordering by a catalogue number. 22. The physical store allows customers to self collect their online purchases. 23. The firm allows customers to choose any physical store from which to pick up their online purchases. 24. The firm allows customers to make payment in the physical store for their online purchases. 25. The physical store provides Internet kiosks for customers to place orders for out-of-stock items.
Integrated Customer Service 26. The in-store customer service centre accepts return, repair or exchange of products purchased online. 27. The online store provides post-purchase services such as email support for the products purchased at physical stores. 28. The online store provides interactive access to the customer service assistant through a real-time chat program.
<i>Table 1. Structural Characteristics of Hybrid Retail Organisations</i>

2.2 Organisational Structure Fit with Strategic Type and Performance

Firms that follow different generic business strategies pursue different structural designs (Walker & Ruekert 1987). For each set of strategic characteristics, there exists an ideal set of organisation structural characteristics that yields superior performance. Fit between the organisational characteristics of a business and its strategic type is desirable as it leads to superior performance (Porter 1996). The effectiveness of strategic resource deployment within a given competitive environment is dependent on adopting strategies that are best suited for the specific contextual requirements (Venkatraman & Prescott 1990). As shown in Figure 1, we hypothesize that: *The more similar a hybrid commerce firm's organisation profile is to that of the ideal hybrid firm for its strategic type, the better is its performance.* In order to examine this coalignment relationship, we adopted the profile deviation approach, which views fit between organisation structure and strategy in terms of degree to which organisational characteristics differs from those of a specified profile identified as ideal for implementing a particular strategy (Venkatraman 1989). Ideal profiles are defined as configurations of organisational characteristics that fit with the implementation requirements of a particular strategy and thus produce high performance.



3 METHODS

3.1 Data Collection

The unit of our analysis is the retail firm with both physical store(s) and a Website. The sampling frame was drawn from *Dun and Bradstreet* directories, and included retail trade companies in Singapore with Standard Industrial Classification (SIC) codes starting from 5211 through 5999. The final sampling frame comprised 562 companies. We conducted the survey from March to May 2005, using the three-wave mailing procedure advocated by Dillman (1999). After accounting for 20 undelivered packages, and discarding eight incomplete responses, we obtained a final usable sample of 125. The response rate of 24.5% is considered reasonable since the survey was unsolicited and involved participation of the senior management of companies. We assessed non-response bias by verifying that early and late respondents did not significantly differ in their demographic characteristics and responses on principal constructs (Armstrong & Overton 1977). We also checked for any common method bias with Harman's Single-Factor Test since each response came from a single key informant (Podsakoff et al. 2003). We found no significant biases in our dataset.

3.2 Operationalisation of Constructs

3.2.1 Business Strategic Type

We employed the operationalisation of strategic orientation of business enterprise (STROBE) business strategy attributes (Venkatraman 1989a) developed by Sabherwal & Chan (2001) to determine the ideal business strategy profiles of each firm as either Defender, Prospector or Analyzer as shown in Table 2. First, the ideal business strategy profile (in terms of the six business strategy attributes) was identified for Prospectors, Analyzers, and Defenders. This profile was based on the theoretical profiles of the three strategy types in terms of the six business strategy attributes. Following Govindarajan (1988), high and low values for the ideal business strategy values were operationalised as +1 and -1, respectively while a medium value was operationalised as a normalized score of zero.

Business Strategy Attributes	Defenders	Prospectors	Analyzers
Defensiveness	High	Low	Medium
Risk Aversion	High	Low	High
Aggressiveness	Medium	High	Medium
Proactiveness	Low	High	Medium
Analysis	Medium	Medium	High
Futurity	High	Medium	Medium

Table 2. Classification of Ideal Strategic Types Based on Business Strategy Attributes

Next, the Euclidean distance between each firm's business strategy and the three groups' ideal business strategies was computed. For instance, for any organisation, its distance from Prospectors was computed as follows:

Distance (Prospectors) = $\sqrt{\sum (X_i - I_{iPRO})^2}$ where X_i = normalized score for the i^{th} business strategy attribute, I_{iPRO} = ideal normalized score of the i^{th} business strategy attribute for Prospectors, and \sum is across the various values of i , and i ranges from 1 to 6 for the six business strategy attributes.

The distance from the ideal business strategy profiles for Analyzers and Defenders were similarly computed. This process produced three distance measures for each organisation, indicating its distance from the ideal profiles for Prospectors, Analyzers, and Defenders. Finally, these distances were used to classify each organisation into one of the three business strategy types. The organisation was classified into the type that had the smallest distance, since this indicated that it is most similar to this strategic type.

3.2.2 Organisational Structure

The extent of differentiation/integration in each of the six organisation structural characteristics was measured with the items as formative indicators as shown in Table 1. This is because business processes within a functional area can be implemented independently according to the strategic decision of the organisation. Hence, they need not be correlated to one another. The level of differentiation/integration was measured on a scale of 0 to 9, with 0 indicating that the organisation is highly differentiated in the particular structural characteristics while 9 reflecting that it is very highly integrated. The items were average to derive a score representing the level of differentiation/integration in each of the six structural dimensions. The overall hybrid organisational structure of each organisation is hence reflected by six scores.

3.2.3 Identification of Ideal Hybrid Organisational Structure Profile

Ideal profile of organisational structure may be determined theoretically or empirically (Venkatraman 1989). Given that multichannel retailing is still a strategy that is in its nascent stage of development, there is no established theory or sufficient empirical research that we could use to develop the ideal profile of hybrid organisation. Hence, we assessed fit using empirically derived ideal profiles. This approach required the identification of high-performing firms with a given strategy and a calibration of their organisation structural characteristics as an ideal profile for implementing that strategy (Venkatraman & Prescott 1990). We first identified the highest performing firms of each strategic type and then calibrated the six hybrid firm structural characteristics of these high performers as the ideal hybrid firm profiles (Doty et al. 1993; Venkatraman 1990). The top 10 per cent best-performing firms for each of the three strategic types were selected. This comprised of the calibration sample used to define ideal profile. Next, we also removed the bottom 10 per cent of the total sample to reduce the bias in restricting the range (Venkatraman & Prescott 1990). The final study sample used for data analysis was the total sample less the calibration sample and the bottom 10 per cent.

3.2.4 Firm Performance

Following Wade and Hulland's (2004) recommendation that the dependent variable for IT-enabled organisational studies should incorporate a competitive assessment of performance, we measured *organisational performance* as an aggregated metric comprising five measurement items of market share gains, net profits, revenue growth, return on investments and return on assets, measured relative to major competitors on a scale of 1 to 7. We expect performance to be influenced by firm size and net-enablement age. Next, it is also likely to be affected by the size of the physical store network. Furthermore, integration of certain activities might differ across various retail industry sectors, and this might influence performance. We use these four factors as control variables.

4 DATA ANALYSIS

4.1 Scale Validation

Before proceeding with the data analyses, we assessed the psychometric properties of the constructs to ensure their reliability. The scale reliability of the six business strategy attributes used to classify strategic types and the aggregated construct of firm performance had Cronbach's alphas that ranged from .79 to .92 for all scales.

4.2 Assumptions Validation

Before testing the hypothesis, we followed the approach used by Vorhies and Morgan (2003) to validate two assumptions. First, based on the predictions of configuration theory, any one of the strategic types can lead to superior performance when implemented appropriately. Analysis of variance tests revealed no significant relationship between strategic type and firm performance ($F = 2.74, p > .05$). Performance of the strategic types can be found in Table 3. Next, we checked that our ideal profiles correctly identified hybrid organisations that contributed to superior performance by being configured in ways that fit the requirements of the organisation's strategic type – and not just those that were high performers regardless of their fit with strategic type. To do so, we compared the performance outcomes of profile deviation from two different ideal organisation profiles, one developed from firms of the same strategic type (within) and one developed irrespective of the firm's strategic type (across). We found that calibrating ideal hybrid organisation profiles within strategic-type groups produced stronger profile deviation term coefficients and greater explanatory power.

Having satisfied the underlying assumptions, we proceeded to examine the configuration theory predictions concerning the relationship between structure-strategy coalignment and firm performance.

4.3 Testing Configuration Theory Predictions with Profile Deviation Analysis

Given that management have strategic choices when it comes to determining the deployment of resources to either integrate or differentiate their retail channels, it is unlikely that all the six organisation structural variables will be equally important (Venkatraman & Prescott 1990). Hence, for each of the 28 items used to determine organisational structure, we asked the respondents to rate the importance of each item on a scale of 0 (not important at all) to 9 (very important). An importance score for each of the six dimensions was then derived by averaging the scores on the respective items. Next, the importance scores of all organisations for each dimension within each strategic type were average to derive a mean importance score (*imp*) for each dimension within strategic types. Finally, the weight (*w*) for each dimension was calculated by dividing the average score (*imp*) by 9 in order to derive a value ranging from 0 to 1.

In order to assess the configurational fit predictions, we derived a profile deviation score that represents the degree to which the organisation profile of each firm is similar to that of the ideal profile for its strategic type. Using the study sample, we calculated the Euclidean distance of each organisation from the ideal organisation profile for its strategic type across the six dimensions:

Distance = $\sqrt{\sum [w_j(X_j - Y_j)]^2}$ where X_j = score for the organisation in the study sample for the j^{th} organisation structural characteristics, Y_j = mean score for the calibration sample (or, the "ideal" type) along the j^{th} organisation structural characteristics, w_j = importance weight of the j^{th} organisation structural characteristics in the environment; and \sum is across the various values of j , and j ranges from 1 to 6 for the six organisation structural characteristics.

The profile deviation score (Distance) for each organisation was then regressed onto the firm performance score. For our hypothesis to be supported, results should indicate that deviation from the ideal hybrid organisation profile is negatively and significantly related to firm performance.

5 RESULTS

5.1 Prospectors, Analyzers, and Defenders

Table 3 shows the descriptive statistics of the sample population by strategic types. We found 21 prospectors, 76 analyzers and 28 defenders in the sample. We observed a pattern that prospectors tend to be represented by high level of integration compared to the other two strategic types. On the other hand, defenders are highly differentiated in their hybrid organisational structure.

	All Firms (n=125)	Strategic Type		
		Prospectors (n=21)	Analyzers (n=76)	Defenders (n=28)
Organisational Structure Characteristics				
Integrated Promotion	5.38 (1.90)	6.07 (1.87)	5.51 (1.87)	4.46 (1.74)
Integrated Transaction Information	2.47 (2.35)	3.31 (2.28)	2.35 (2.27)	2.13 (2.57)
Integrated Product and Pricing Info	5.29 (2.24)	5.89 (2.29)	5.45 (2.30)	4.35 (1.82)
Integrated Information Access	1.51 (1.70)	1.71 (1.65)	1.55 (1.84)	1.25 (1.34)
Integrated Order Fulfilment	1.62 (1.84)	1.87 (1.88)	1.74 (1.92)	1.09 (1.51)
Integrated Customer Service	2.44 (2.46)	3.90 (2.31)	2.19 (2.49)	2.02 (2.12)
Performance	4.42 (.91)	4.88 (.97)	4.34 (.92)	4.28 (.76)
Table 3. Descriptive Statistics of the Sample Population by Strategic Types: Mean Scores(S.D.)				

5.2 Performance Implications of Coalignment

The correlation coefficients between profile deviation and firm performance for each of the strategic types are shown in Table 4. Results suggested some preliminary support for the coalignment proposition, i.e. the smaller the deviation of the organisation profile from the ideal profile of its strategic type, the greater is the firm performance.

	Performance	
	Correlation Between Profile Deviation and Performance	Sample (n)
Prospectors	-.80**	17
Analyzers	-.34*	60
Defenders	-.59*	22
All Firms	-.48***	99
*** p < .001; ** p < .01; * p < .05		
<i>Table 4. Organisation Fit with Strategic Type and Performance: Regression Models</i>		

To further establish our hypothesis taking into account the four control variables, we regressed profile deviation, the control variables onto firm performance separately for each strategic type. Results in Table 5 provided further support for our hypothesis. Our firm performance regression models showed significant, negative coefficients for deviation from the performance-maximizing ideal profile for organisation implementing a prospector strategy (= -.62, p < .05), an analyzer strategy (= -.30, p < .05), and a defender strategy (= -.56, p < .05).

Next, in order to ascertain the power of these tests, we developed an alternative non-ideal profile by using five randomly selected firms as calibration sample from which we calculated the deviation of the remaining firms (e.g., Venkatraman & Prescott 1990). We then used the non-ideal profile deviations in the regression models. Results indicated that there were no significant relationship between deviation from the non-ideal profile and firm performance for any of the three strategic types. This suggested that by calibrating organisations with their ideal profile, we attained greater explanatory power in the regression models compared to calibrating with non-ideal profiles.

	Performance					
	Prospectors		Analyzers		Defenders	
Independent Variables	Ideal Profile Models	Non-ideal Profile Models	Ideal Profile Models	Non-ideal Profile Models	Ideal Profile Models	Non-ideal Profile Models
Profile Deviation	-.62*	-.08	-.30*	.16	-.56*	.06
Years of Net-enablement	.14	.38	.10	.06	.13	.15
Retail Sector	.10	.05	.12	.03	.09	.20
Number of Physical Stores (log)	.52	.52	.32	.16	.30	.42
Firm Size (log)	.31	.69	.09	.22	.01	.24
R ²	.79	.41	.22	.14	.46	.17
F-value	5.20*	.84	4.26*	1.65	4.68*	.45
* p < .05						
Table 5. Organisation Fit with Strategic Type and Performance Regression Models						

6 DISCUSSION

Based on our dataset of hybrid commerce organisations, we found that the organisational structure of these retail organisations is rather differentiated with an average score of 3.12. This attests to anecdotal reports that the degree of retail channel integration in the industry is indeed rather low. The two most highly integrated organisational functions are utilizing IT to integrate promotional activities and information ($M=5.38$) as well as to ensure that the product and pricing information in all retail channels are consistent ($M=5.29$). On the other hand, the ability to provide integrated information access ($M=1.51$) and order fulfilment ($M=1.62$) are the two weakest areas.

The inability to provide integrated information access is primarily due to the low adoption of in-store kiosks to allow access to the information and functionalities available on the Website when consumers are in the physical store. Given the ability of kiosk technology to reduce costs, increase orders for out-of-stock items, and allow self-checkout, it merits attention from hybrid commerce organisations. Another functional area that provides opportunities for greater integration is providing options for consumers to complete their order in their preferred channel. However, in order to provide cross-channel order fulfilment, investments into IT infrastructure to ensure real-time connectivity and synchronized databases between the online store and physical stores are critical.

Having examined the implication for the current state of hybrid organisational structure in the industry, we next turn our attention to the business strategies implemented. Based on the six business strategy attributes, we found that there are 16.8% of prospectors, 60.8% of analyzers, and 22.4% of defenders in the sample population. There exists some correlation between strategic type and the extent of integration in the hybrid organisational structure. Prospectors tend to be characterized by the highest level of integration across all the six organisation structural dimensions while defenders are more differentiated in their hybrid organisational structure. Analyzers lie in between these two strategic types. This converges with past studies, which found that prospectors are more likely to initiate innovations in promotion and distribution (McDaniel & Kolari 1987) while defenders lag the rest of the industry in innovative behaviour, and analyzers place a priority on being “second-in” with more cost-effective or value-oriented product or service offerings (Miles and Snow 1978).

Compared to a similar IS study by Sabherwal and Chan (2001) that have used the STROBE classifications to derive strategic types, the distribution of the three ideal types in our sample are rather different. In Sabherwal and Chan’s (2001) sample of pharmaceutical manufacturing, auto parts manufacturing, banking and insurance industries, they reported 34.5% of prospectors, 44.3% of analyzers, and 21.2% of defenders. In our sample from retail industry, and more specifically multichannel retailers, the low percentage of prospectors underscores the fact that transformation into highly integrated hybrid commerce requires huge investments to be the pioneer in introducing new

products and services. Besides IT investments, it is also important to make substantial investments into training of frontline service employees to ensure that they are able to take over the job from the Website to effectively service multichannel consumers (Rayport & Jaworski 2005). Investments into IT and human resources are complementary due to the hybrid nature of the organisation straddling the online and physical environments. Since analyzers accomplished their goals through imitating the most successful product or market innovations developed by prominent prospectors (Miles et al. 1978), a large proportion of our study's retailers choose to be more cautious in their implementation.

The prospectors in our sample seem to have higher perceived firm performance compared to the other two strategic types. As retail organisations are still in a stage of adaptation to hybrid commerce, this finding is quite expected since prospectors tend to perform better in an environment where the industry structure is still evolving (Walker et al. 2003). However, the differences across the three strategic types are not statistically significant. Analyzers only perform marginally better than defenders. The results support the principle of strategic equifinality, which states that when implemented appropriately, all the three business strategies can be effective. This finding is in line with previous research findings (e.g., Conant et al. 1990).

7 LIMITATIONS, IMPLICATIONS AND FUTURE RESEARCH

The findings of a study must be judged in the context of its limitations. First, even though we have carried out statistical tests to address potential biases, interpretation of our results must be done in the light that we had collected data on each firm through a single informant. Second, the dataset comprising only Singapore retail firms might limit the generalisability of our results. While the context of our study might provide fresh insights from an emerging Asian market, replication of the study in other countries is necessary for the validation and extension of the findings. Third, even though our sample size is of sufficient power to detect meaningful effects, future research should benefit from a larger sample. This is especially so since the ideal firm profiles for prospectors and defenders were derived from a rather small number of firms.

From a managerial perspective, this suggests that imitating a competitor's hybrid organisational structure can be less advantageous to an organisation than expected, unless there are strong similarities in the firm's business strategies (Sabherwal & Chan 2001). Our results also generated some insights for managers to perform benchmarking. They can use the profile of the firms with superior performance as a benchmark and then recalibrate their organisational form to match those of the benchmark firms.

The study also makes several theoretical contributions. First, it provides empirical evidence to understand the Miles and Snow's business strategy typology in the new context of hybrid commerce. We have identified the profiles that make each business strategy successful. Second, through the configurational assessment of fit between hybrid organisational structure and business strategic type, our results attest to the coalignment hypothesis that superior performance can be accrued by retail organisations through integrating their operations into a hybrid organisational structure that resemble the high-performing firms of its strategic type. More significantly, we have operationalised the organisation structural dimension of differentiation/integration and assessed its fit with business strategy. We add fresh contributions to the organisation design literature and rejuvenate the findings of the structure-strategy fit relationship. This is because the bulk of the extant research has examined the business strategy fit with organisation structural variable such as formalization, decentralization and specialization. Finally, our results lend support to the notion of resource complementarity emphasized in recent thinking about the performance-enhancing role of IT in organisations (Melville et al. 2004; Wade & Hulland 2004). We have some evidence that investments in IT alone might not produce superior performance. Instead, in our research context, investments into the training of frontline service employees are equally important for improved IT-enabled organisational performance.

This study represents the first attempt to understand how retail organisations make investments to transform their organisational structure into a hybrid form by combining physical and online retail channels. Our exploratory work opens up numerous opportunities for future research. First, the current research examines hybrid organisational structure in the context of retail industry since the configuration theory literature advocates the use of single industry studies to control for industry effects (Ketchen et al. 1997). However, we are increasingly seeing more organisations in other industry integrating their physical operations with online activities. Hence, a natural extension to this study would be to study the differentiation and integration in organisational structure in the context of other industries. Second, our study synthesized the methodological recommendations proposed by Venkatraman (1989), Venkatraman and Prescott (1990) and Sabherwal and Chan (2001) to assess coalignment in a rigorous manner. It demonstrates the utility of profile deviation approach in assessing fit-performance relationships. This can serve as a reference for other researchers intending to examine configurational fit in other emerging organisational forms. Next, we have empirically tested the approach recommended by Venkatraman and Prescott (1990) to solicit importance weights of organisational attributes directly from the managers and using these weights to adjust for the relative importance when calculating the deviation. We have validated the applicability of this approach.

8 CONCLUSION

Competing in the dynamic and turbulent retail industry requires organisational configurations that involve coordination between multiple organisational characteristics. The challenges are indeed multidimensional and in our research context, multichannel as well. There is no doubt that investments into IT and human resources play a critical role in enabling such transformation. However, as our results indicate, realizing business value from investments into retail channel integration requires management to match the level of IT-enabled hybrid organisational structure with its strategic type. Organisations can only achieve competitive advantage when such a configurational fit between organisational structure and business strategy has been attained.

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